



Virginia Wing

Volunteer Citizens Serving Communities

Overview for Educators



www.gocivilairpatrol.com

Col Dean Gould
Lt Col Paul Willard
Lt Col Keith Mottas



CAP History



Formed December 1, 1941 for civilian aviation purposes, Civil Air Patrol is a nonprofit, humanitarian corporation chartered by Congress and is the official Auxiliary of the United States Air Force.

1942- Cadet Program started
1946- Incorporated by Congress
1948- Became USAF Auxiliary
1953- Began aviation training in schools
Today- Outreach to the nation-
schools and communities;
air, sea, ground, and cyber defense



www.gocivilairpatrol.com



The Tri-Blade Missions



Emergency Services



Cadet Programs



Aerospace Education

Congressionally Chartered
Three Missions



Our Mission



- **Supporting America's communities with emergency response, diverse aviation and ground services, youth development, and promotion of air, space, and cyber power.**



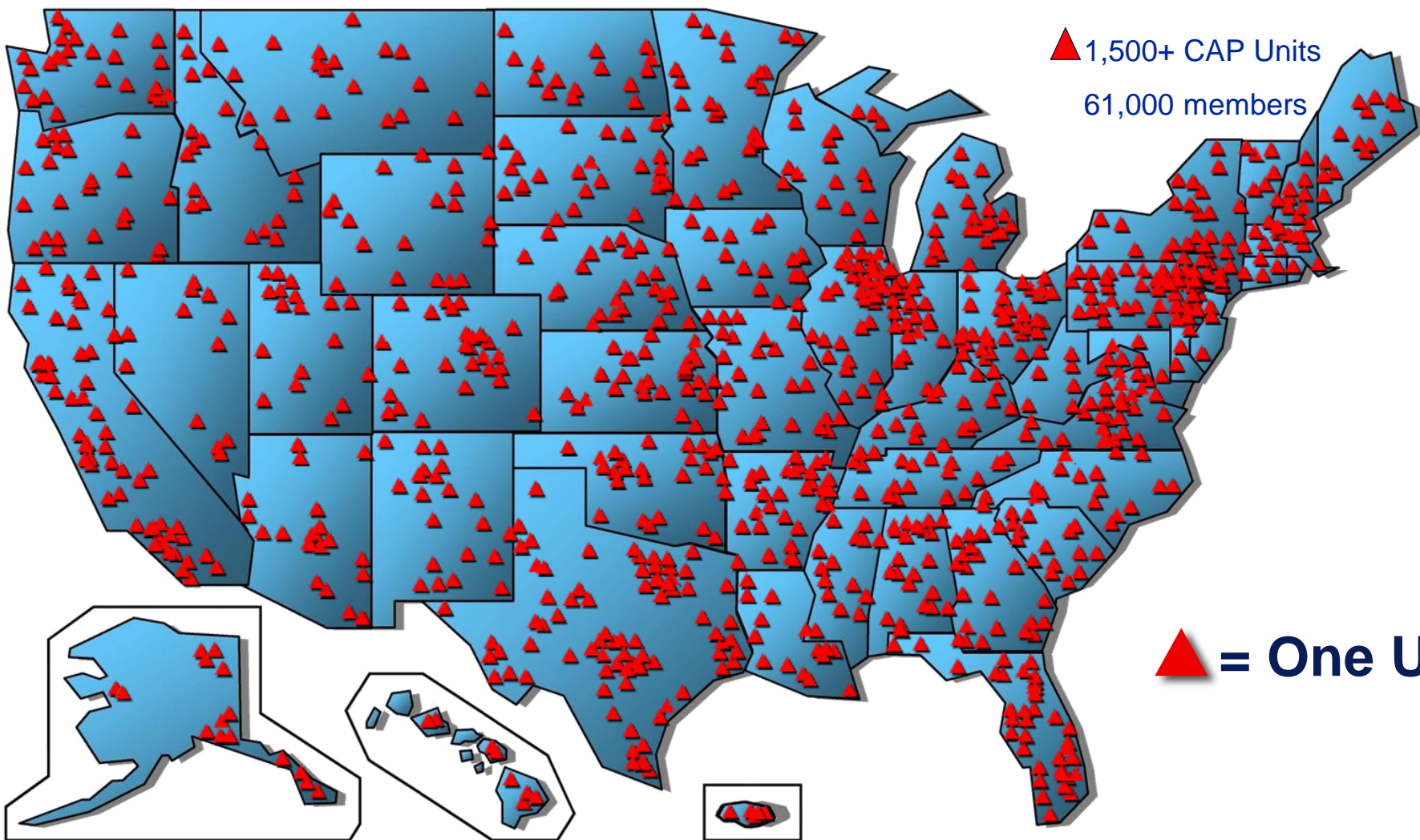


Civil Air Patrol Presence



▲ 1,500+ CAP Units
61,000 members

▲ = One Unit

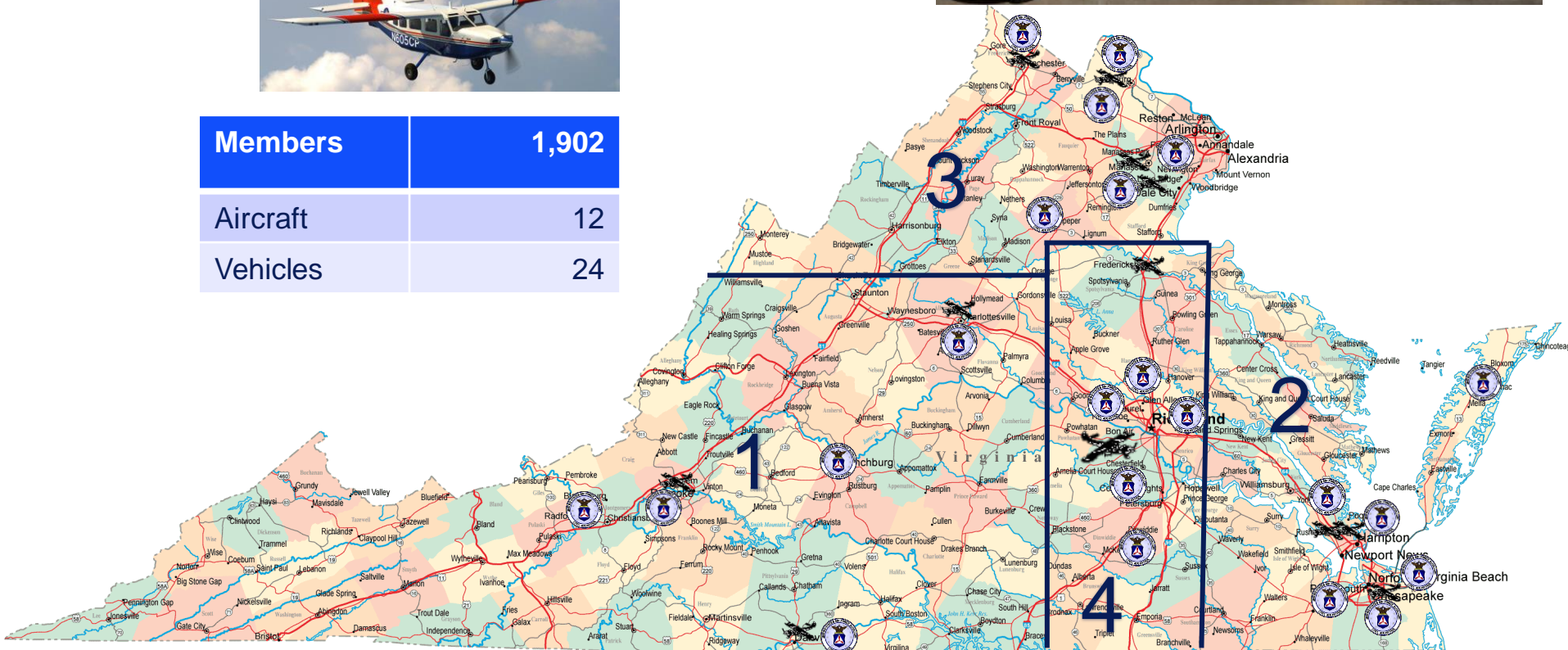




Virginia Wing Presence



Members	1,902
Aircraft	12
Vehicles	24





Serving America



...by performing Homeland Security and humanitarian missions for our communities, state, and nation



...by developing our country's youth and educating them on the importance of air, space and cyber power.

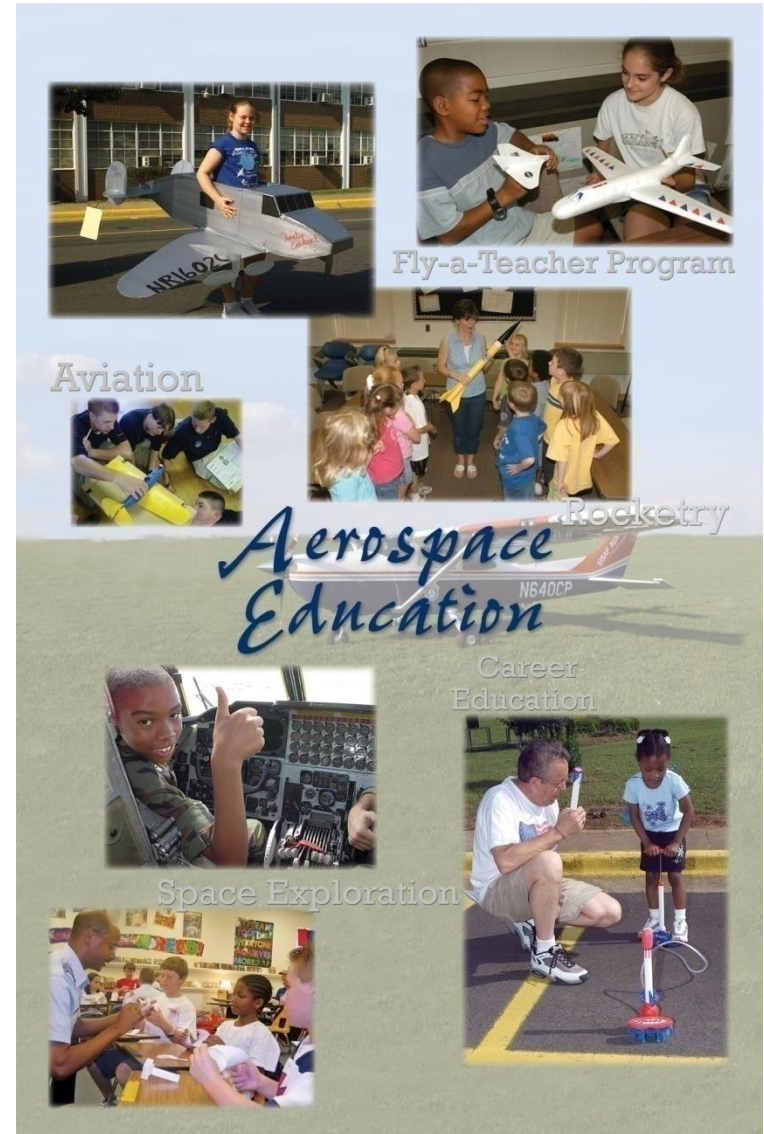


Aerospace/STEM Education



- School & Youth Organization Programs Supported
- K-12 National Academic Standard Aligned Products
- Grant , Award, STEM Kit, & Professional Development Programs
- Orientation Airplane Flights for AFROTC, AFJROTC, and CAP Cadets, as well as Educators
- STEM Career Education/Exploration

www.capmembers.com/ae





Importance of STEM Education



- America needs at least 20,000 more engineers for the future due to:
 - an aging aerospace/STEM industry workforce
 - increased demand for new technical careers
 - lack of interest of youth (especially female and minority students) toward STEM careers
 - less than 15% of American high school students pursue engineering degrees and STEM careers



Resolution lies in the K-12 Classrooms and youth Organizations of America



The Aerospace Education Member (AEM)...



- For any educator in a public, private, parochial, or home school environment
- Member of National Headquarters Unit 004; not a member of a local CAP unit
- Does not wear a CAP uniform or regularly attend CAP unit meetings (can help teach AE lessons for units, if desired)
- Encouraged to share CAP's aerospace/STEM ed and cadet programs with youth

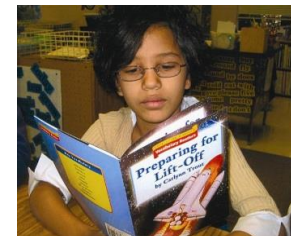




CAP's Aerospace/STEM Ed Program



- Emphasizes science, technology, engineering and math (STEM)-related subjects and career options using the aerospace theme
- Collaborates with industry and other youth organizations for STEM ed promotion
- Provides aerospace/STEM programs and products to schools and community-based youth organizations, as well as museums
- Supports over 3,200 American educators, impacting over 320,000 K-12 youth
- Supports over 25,000 middle & high school students in the Cadet Program
- Helps to prepare future aerospace/STEM workforce to maintain national security





CAP's AE/STEM Products & Programs



- Over 30 free K-12 educational products including a 675-page, full-color comprehensive textbook
- Online STEM Resources & Career Module
- Aligned with National Standards of Learning
- Opportunities for professional development, awards, grants, STEM Kits, and flights





Unique CAP Aerospace/STEM Programs



- Model Rocketry, Robotics, Satellite Imagery, Remote-Controlled Aircraft, Cybersecurity, Astronomy, Career Exploration Programs
- K-12 Aerospace Education Excellence (AEX) Award Program
- K-6 Aerospace Connections in Education (ACE) Program
(Presenting Sponsor: The Air Force Association)
- Free STEM Kits
- Teacher Orientation Program (TOP) Flights at local airports

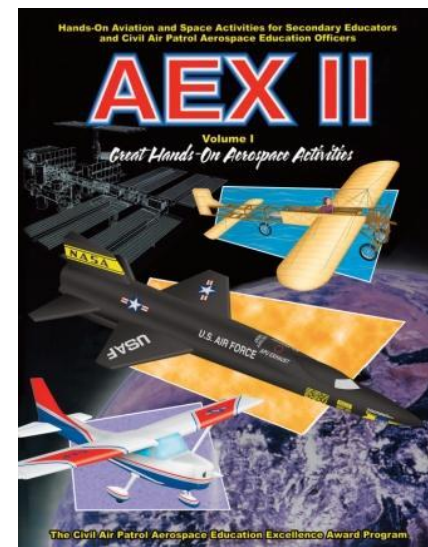




K-12 AE Excellence (AEX) Award Program



- Free program with several AEX books for grades K-5; 6-12
- All easy and inexpensive activities and lessons aligned with national academic standards of learning
- To earn an AEX educator certificate:
 - Complete 6 lessons from any books and conduct one 2-hour event, such as a museum or airport trip, a rocket or hot air balloon launch, or a robotics competition, etc.
- There's no penalty if not completed.



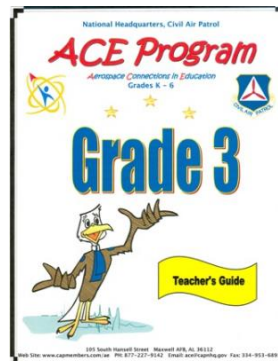
Check it out: www.capmembers.com/aex



K-6 Aerospace Connections in Education



- Free program with a teacher guide, class set of educational manipulatives, and completion certificates
- Uses aerospace theme to promote all areas of academics focusing on STEM
- Grade-level specific curriculum guides - 21 lessons per guide
- Engaging, lessons aligned with national academic standards
- Can be implemented by one teacher or by entire school





Grants, Awards, & STEM Kit Program



- The Air Force Association provides funding for \$250 grants to CAP educator members twice annually: March 31 and September 30
- CAP has a National AE Teacher of the Year Program with nominee submissions by January 15 annually
- Check these out at the AEM Grants & Awards section at www.capmembers.com/ae
- CAP STEM Kit Program provides CAP educator members the opportunity to apply for one of five STEM Kits for classroom use:

- Astronomy
- Flight simulator
- Radio-controlled aircraft
- Robotics
- Rocketry





Benefits to Educators



Take your classroom to the skies

**CAP programs, products, grants,
and workshops assist educators
in sharing aerospace/STEM
education with the
youth of America**





Benefits to Virginia and the U.S.A.



**Technologically
prepared**

STEM workforce





CAP: Investing in America's Future





Questions & Websites



www.gocivilairpatrol.com

www.vawg.cag.gov

www.capmembers.com